MULTIPLE CD PLAYER

1060CD/1070CD
DP-R6090/R7090
D-R350
SERVICE MANUAL

KENWOOD

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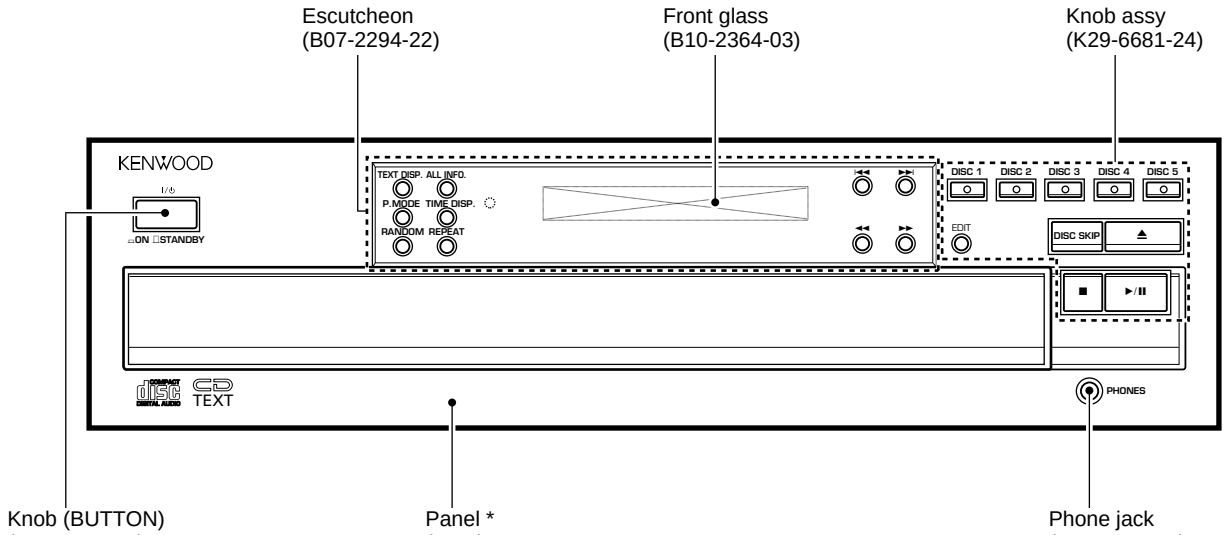

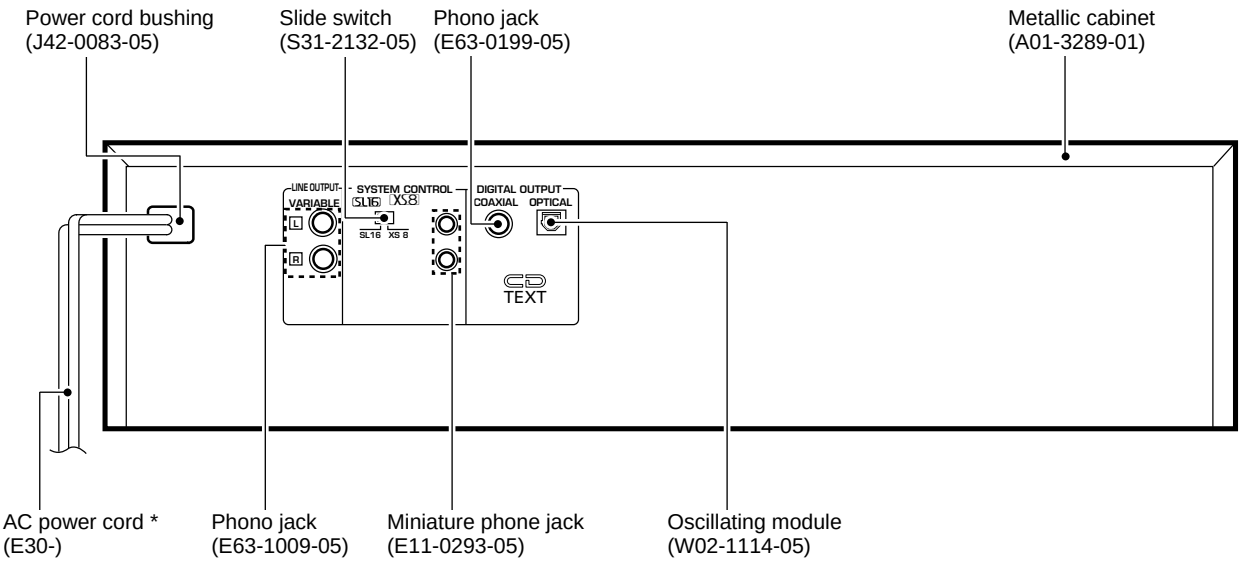

In compliance with Federal Regulations, following are reproductions of labels on, or inside the product relating to laser product safety.

KENWOOD-Corp. certifies this equipment conforms to DHHS Regulations No. 21 CFR 1040. 10, Chapter 1, Subchapter J.

DANGER : Laser radiation when open and interlock defeated.
AVOID DIRECT EXPOSURE TO BEAM.

Illust is DP-R6090.

*** Refer to parts list on page 21.**

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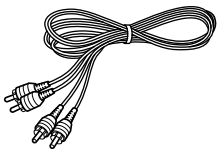
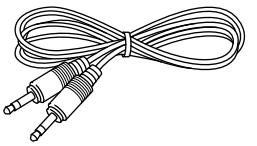
Accessories

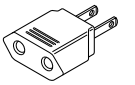
Audio cord (1)
(E30-0505-05)



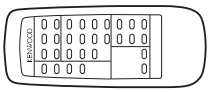
System control cord (1)
(E30-2733-05)



AC plug adapter (1)
(E03-0115-05)
DP-R6090/R7090/D-R300 : M type only

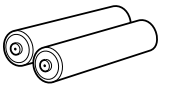


Remote control unit (1)
(A70-1134-05) : RC-P0601
1060CD/1070CD/DP-R6090/R7090



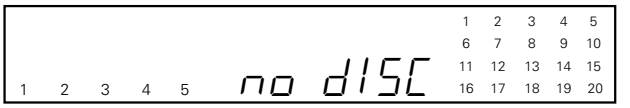
Battery cover: (A09-0356-08)

Batteries (R6/AA) (2)
DP-R4090 only

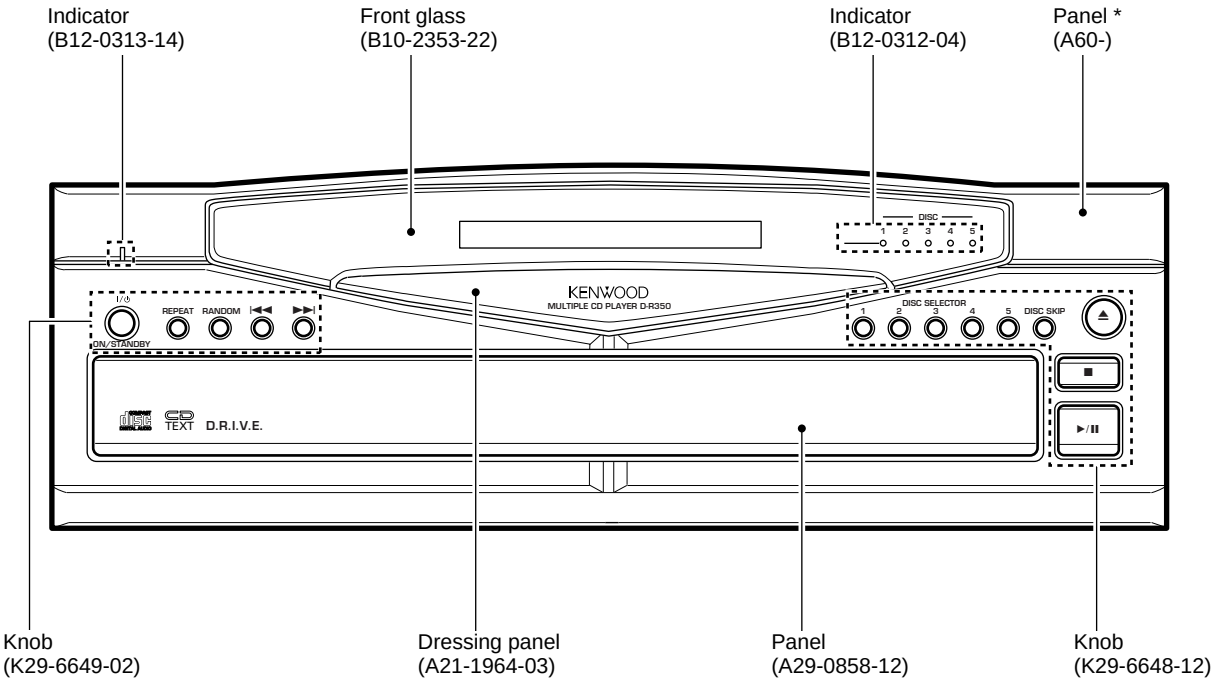


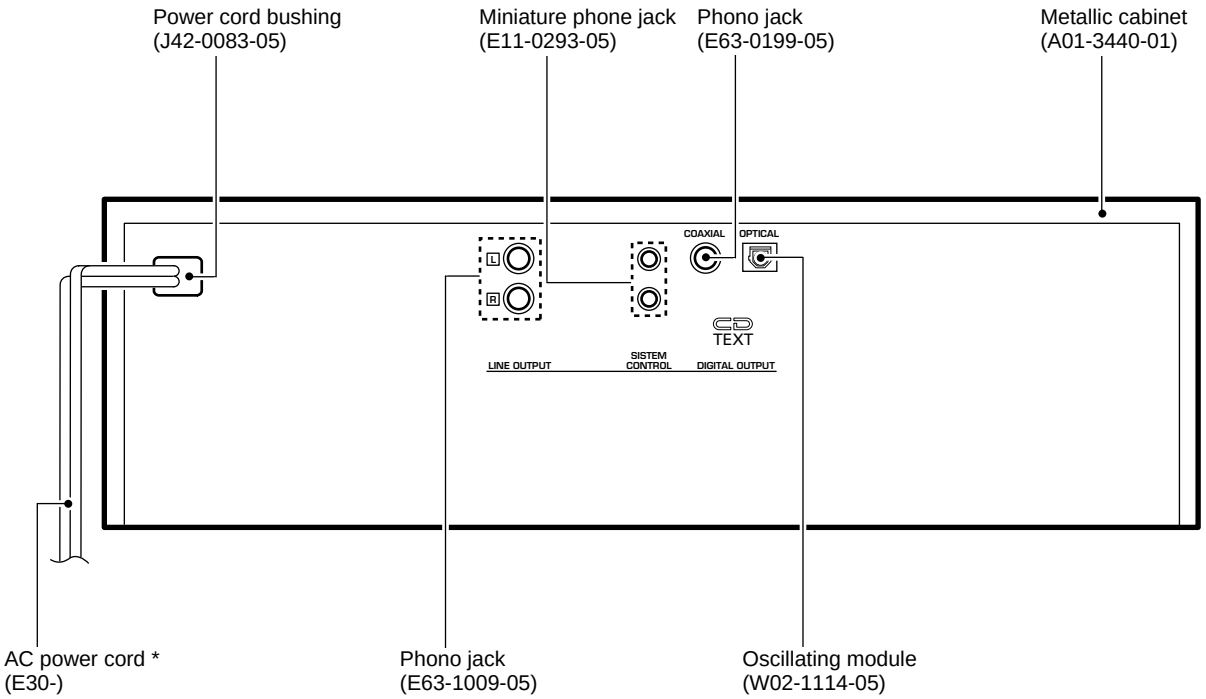
Caution

Note related to transportation and movement
Before transporting or moving this unit, carry out the following operations.
1. Turn the power ON but do not load a disc.
2. Wait a few seconds and verify that the display shown appears. Wait further a few seconds.
3. Turn the power OFF.



EXTERNAL VIEW





Illust is D-R350.

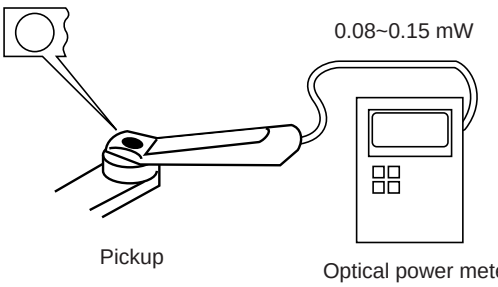
*** Refer to parts list on page 21.**

ADJUSTMENT

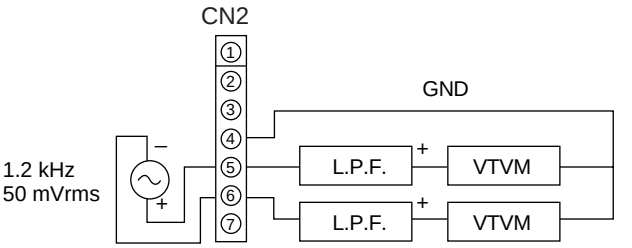
No.	ITEM	INPUT SETTINGS	OUTPUT SETTINGS	PLAYER SETTINGS	ALIGNMENT POINTS	ALIGN FOR	FIG.
Step 1~4 are in TEST MODE							
1	LASER POWER	–	Apply the sensor section of optical power meter on the pickup lens.	While pressing the RANDOM key, turn the AC ON. (Test mode) Press the PLAY/PAUSE key, then confirm that the display is "03".	–	On the power from 0.08 to 0.15 mW, when the diffraction grating is correctly aligned with the RF level of 1.0 Vp-p or more.	(a)
2	TRACKING ERROR BALANCE	Test disc Type 4	Connect an oscilloscope as follows. CH1 : RF (CN2 pin 1) CH2 : TE (CN2 pin 6)	Press the PLAY/PAUSE key, then confirm that the display is "03".	TE BALANCE VR2	Symmetry between upper and lower patterns	
3	FOCUS ERROR BALANCE	Test disc Type 4	Connect an oscilloscope as follows. CH1 : RF (CN2 pin 1) CH2 : FE (CN2 pin 2)	Press the PLAY/PAUSE key, then confirm that the display is "05".	FE BALANCE VR1	Optimum eye pattern	
4	TRACKING GAIN	Test disc Type 4 Apply signal of 1.2 kHz, 50mVrms to CN2 pin 5-6.	Connect a LPF to CN2 pin 5-6 to which you connect an oscilloscope or AC voltmeters.	Press the PLAY/PAUSE key, then confirm that the display is "05".	TRACKING GAIN VR3	Two VTVMs should read the same value.	(e)

Note:
Type 4 disc : SONY YEDS-18 Test Disc or equivalent.
LPF: Around 47 kΩ+ 390 pF or so.

(a) Laser power



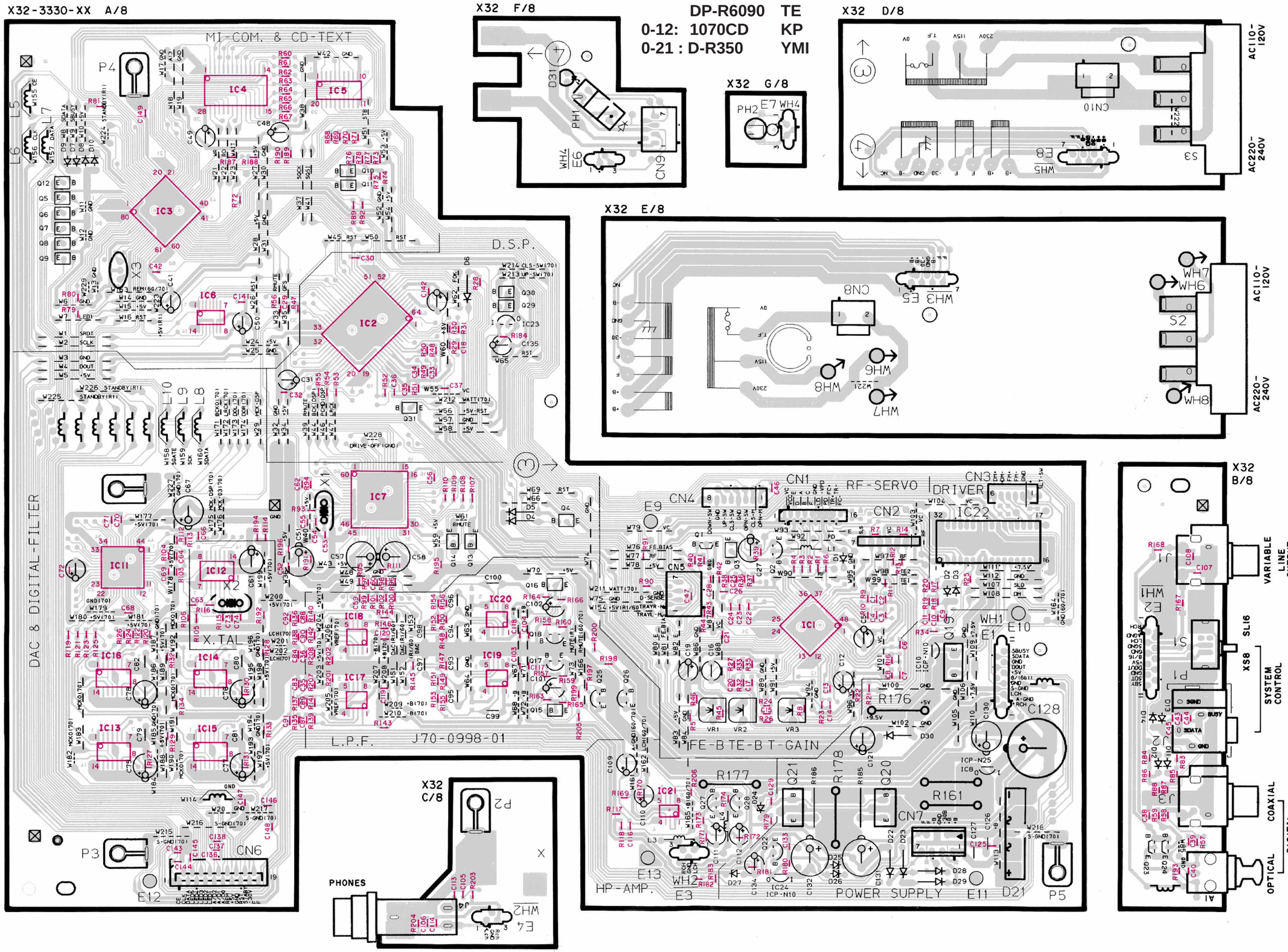
(e) Tracking gain



PC BOARD(Component side view)

CD player unit (X32-333x-xx)

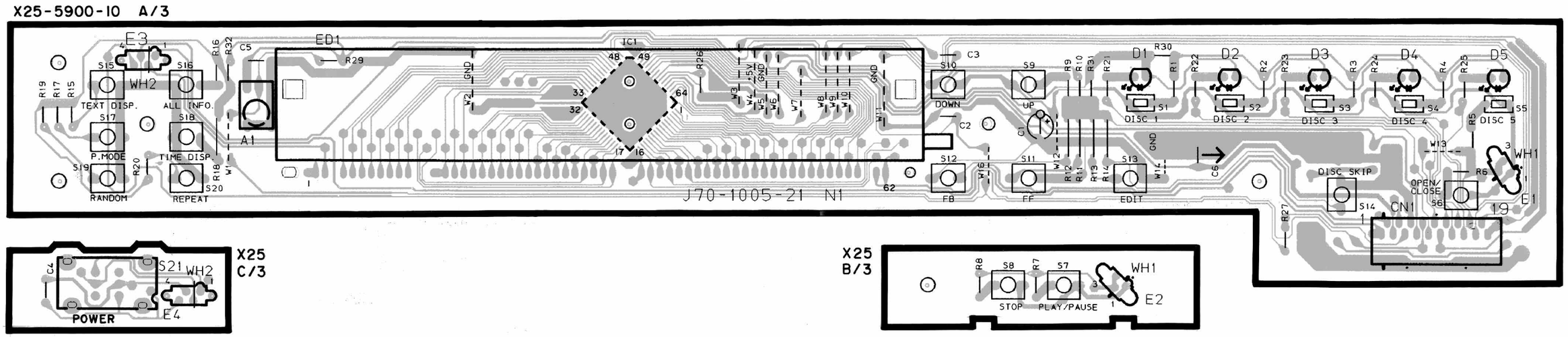
0-10 :	D-R350	KP	0-22 :	1060CD	Y	0-23 :	1070CD	Y
0-11 :	1060CD	KP		DP-R6090	M			
	DP-R6090	TE						
0-12:	1070CD	KP						
0-21 :	D-R350	YMI						



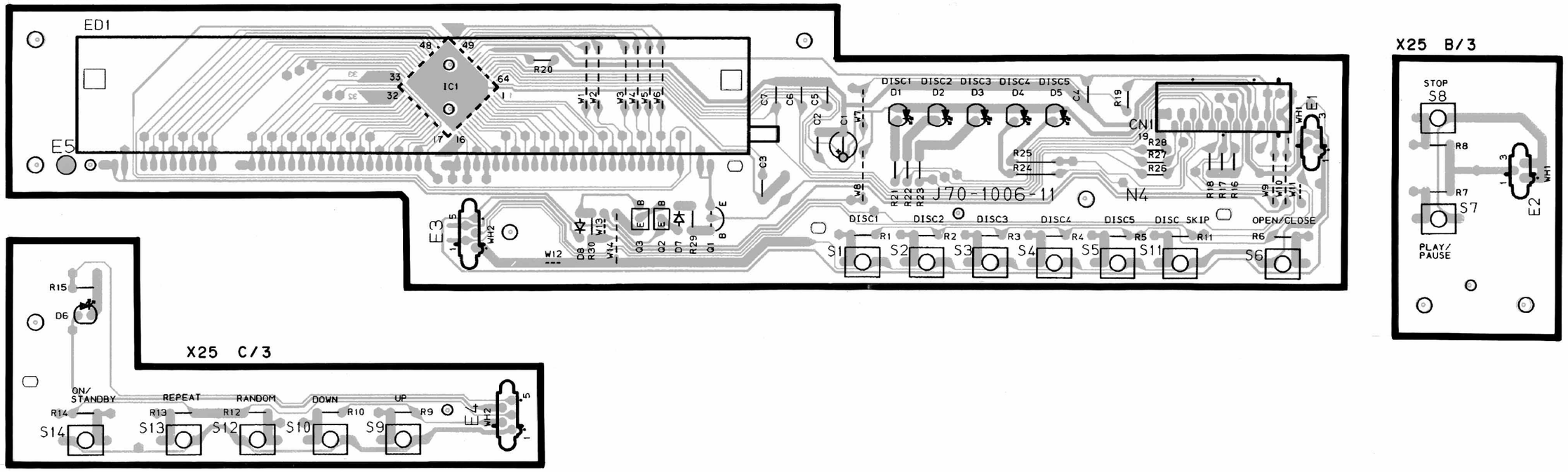
Refer to the schematic diagram for the value of resistors and capacitors.

PC BOARD(Component side view)

Display unit (X25-590x-xx) **0-10 : 1070CD**
DP-R7090
0-11 : 1060CD
DP-R6090



Display unit (X25-5910-10) D-R350



Refer to the schematic diagram for the value of resistors and capacitors.

MECHA. ASS'Y (CDM-25)
(X92-1930-10/X92-1960-71)

TRAVERSE UNIT : D40-1500

PICKUP ASS'Y : T25-0050-05

CD PLAYER UNIT
(X32-3330-XX) (A/8)

IC1 RF/SERVO IC

IC2 D.S.P. (BOTTOM VIEW)

IC3 u-COM (BOTTOM VIEW)

IC4 S-RAM IC CD TEXT DATA MEMORY (BOTTOM VIEW)

IC5 D-LATCH (BOTTOM VIEW)

IC6 CD TEXT DATA LSI (BOTTOM VIEW)

IC7 D.R.I.V.E. DIGITAL FILTER (D.A.C.) (BOTTOM VIEW)

IC22 6CH BTL DRIVER

IC23 RESET IC

Q1 FE BIAS CONTROL

Q2 LASER DIODE DRIVER

Q3 LASER ON/OFF CONTROL

Q4 FE BIAS CONTROL

FE-BIAS

TE-BAL

T-GAIN

ADJUSTMENT

SLT

FEED MOTOR

DISC MOTOR

D.M

CLAMP SW UP/DOWN

TRAY SW OPEN/CLOSE

LOADING MOTOR

L.M

FOCUS COIL

TRAKING COIL

SHORT LAND

D65 : SIR-33ST3
PH1 : T95-0145-05
PH2 : RPT-38PT3F

PHOTO TRANSISTOR

PHOTO INTERRUPTER

PHOTO DIODE

ROTARY MOTOR

R.M

MECHANISM ON/OFF CONTROL

ROTARY MOTOR ON/OFF CONTROL

+5V AVR

CD TEXT DATA LSI

RTL: 2.5V RTR: 0V

RTL: 0V RTR: 2.5V

RTL: 2.7V

RTR: 2.7V

TRAY OPN: 1.9V

TRAY CLS: 1.9V

MUTE ON: 4.2V OFF: 0V

ON: 3.0V OFF: 4.2V

ON: 0V OFF: 4.2V

DIGITAL

(X32-) (G/8)

(X32-) (F/8)

K L M N O P Q R S T

IC11 24 BIT D/A CONVERTER (BOTTOM VIEW)

IC12 (1/6) (2/6) (3/6) (4/6) (5/6) (6/6) INVERTER

IC13 IC14 IC15 IC16 D-FLIP FLOP

IC18 (1/2) (2/2) IC17 (1/2) (2/2) IC19 (1/2) (2/2) IC20 (1/2) (2/2) IC21 (1/2) (2/2) OPE AMP (L.P.F.)

Q5-9,12 LED CURRENT BUFFER

Q13-16 MUTE CONTROL

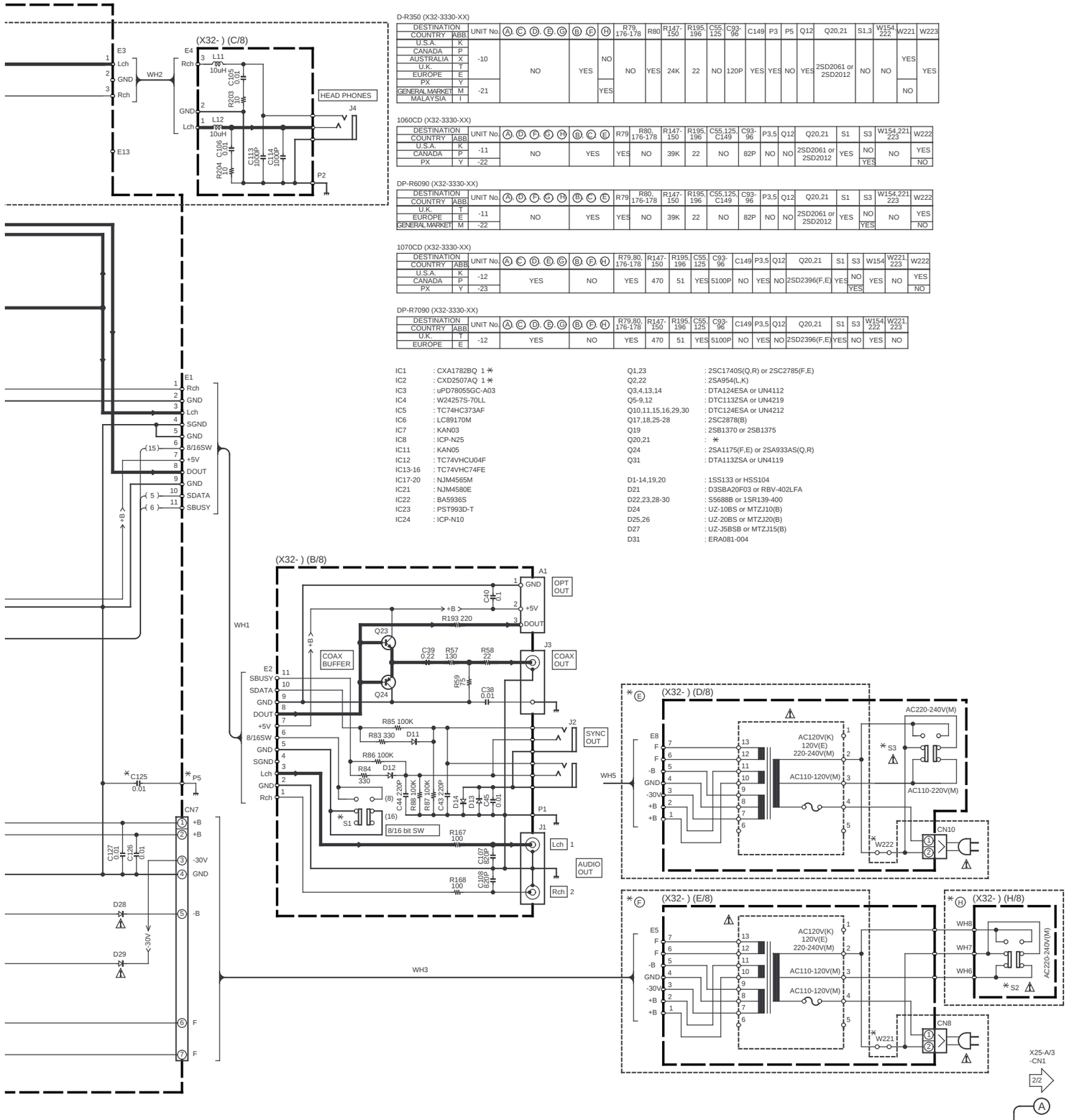
Q17,18,25,26 AUDIO MUTE

IC8 IC24 IC PROTECTOR

+9.5V AVR -40V AVR

OPE AMP Lch Rch MUTE

CN6 P3



D-R350 (X32-3330-XX)

DESTINATION		UNIT No.	Ⓐ Ⓒ Ⓓ Ⓔ Ⓖ	Ⓑ Ⓕ	Ⓗ	R79, 176-178	R80	R147-150	R195, 196	C55, 125	C93-96	C149	P3	P5	Q12	Q20,21	S1,3	W154 222	W221	W223
COUNTRY	ABB.																			
U.S.A.	K	-10	NO	YES	NO	NO	YES	24K	22	NO	120P	YES	YES	NO	YES	2SD2061 or 2SD2012	NO	NO	YES	YES
CANADA	P																			
AUSTRALIA	X																			
U.K.	T																			
EUROPE	E																			
PX	Y																			
GENERAL MARKET	M	-21			YES														NO	
MALAYSIA	I																			

1060CD (X32-3330-XX)

DESTINATION		UNIT No.	Ⓐ Ⓓ Ⓕ Ⓖ Ⓗ	Ⓑ Ⓒ Ⓔ	R79	R80, 176-178	R147-150	R195, 196	C55,125, C149	C93-96	P3,5	Q12	Q20,21	S1	S3	W154,221, 223	W222
COUNTRY	ABB.																
U.S.A.	K	-11	NO	YES	YES	NO	39K	22	NO	82P	NO	NO	2SD2061 or 2SD2012	YES	NO	NO	YES
CANADA	P														YES		NO
PX	Y	-22															

DP-R6090 (X32-3330-XX)

DESTINATION		UNIT No.	Ⓐ Ⓓ Ⓕ Ⓖ Ⓗ	Ⓑ Ⓒ Ⓔ	R79	R80, 176-178	R147-150	R195, 196	C55,125, C149	C93-96	P3,5	Q12	Q20,21	S1	S3	W154,221, 223	W222
COUNTRY	ABB.																
U.K.	T	-11	NO	YES	YES	NO	39K	22	NO	82P	NO	NO	2SD2061 or 2SD2012	YES	NO	NO	YES
EUROPE	E														YES		NO
GENERAL MARKET	M	-22															

1070CD (X32-3330-XX)

DESTINATION		UNIT No.	Ⓐ Ⓒ Ⓓ Ⓔ Ⓖ	Ⓑ Ⓕ Ⓗ	R79,80, 176-178	R147-150	R195, 196	C55, 125	C93-96	C149	P3,5	Q12	Q20,21	S1	S3	W154	W221, 223	W222
COUNTRY	ABB.																	
U.S.A.	K	-12	YES	NO	YES	470	51	YES	5100P	NO	YES	NO	2SD2396(F,E)	YES	NO	YES	NO	YES
CANADA	P														YES			NO
PX	Y	-23																

DP-R7090 (X32-3330-XX)

DESTINATION		UNIT No.	Ⓐ Ⓒ Ⓓ Ⓔ Ⓖ	Ⓑ Ⓕ Ⓗ	R79,80, 176-178	R147-150	R195, 196	C55, 125	C93-96	C149	P3,5	Q12	Q20,21	S1	S3	W154 222	W221, 223
COUNTRY	ABB.																
U.K.	T	-12	YES	NO	YES	470	51	YES	5100P	NO	YES	NO	2SD2396(F,E)	YES	NO	YES	NO
EUROPE	E																

IC1 : CXA1782BQ ⚠
IC2 : CXD2507AQ ⚠
IC3 : uPD78055GC-A03
IC4 : W24257S-70LL
IC5 : TC74HC373AF
IC6 : LC89170M
IC7 : KAN03
IC8 : ICP-N25
IC11 : KAN05
IC12 : TC74VHCU04F
IC13-16 : TC74VHC74FE
IC17-20 : NJM4565M
IC21 : NJM4580E
IC22 : BA5936S
IC23 : PST993D-T
IC24 : ICP-N10

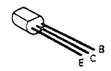
Q1,23 : 2SC1740S(Q,R) or 2SC2785(F,E)
Q2,22 : 2SA954(L,K)
Q3,4,13,14 : DTA124ESA or UN4112
Q5-9,12 : DTC113ZSA or UN4219
Q10,11,15,16,29,30 : DTC124ESA or UN4212
Q17,18,25-28 : 2SC2878(B)
Q19 : 2SB1370 or 2SB1375
Q20,21 : ⚠
Q24 : 2SA1175(F,E) or 2SA933AS(Q,R)
Q31 : DTA113ZSA or UN4119

D1-14,19,20 : 1SS133 or HSS104
D21 : D3SBA20F03 or RBV-402LFA
D22,23,28-30 : S5688B or 1SR139-400
D24 : UZ-10BS or MTZJ10(B)
D25,26 : UZ-20BS or MTZJ20(B)
D27 : UZ-J5BSB or MTZJ15(B)
D31 : ERA081-004

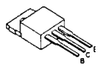
CAUTION: *For continued safety, replace safety critical components only with manufacturer's recommended parts (refer to parts list). ⚠ indicates safety critical components. For continued protection against risk of fire, replace only with same type and rating fuse(s). To reduce the risk of electric shock, leakage-current or resistance measurements shall be carried out (exposed parts are acceptably insulated from the supply circuit) before the appliance is returned to the customer.*

The DC voltage is an actual reading measured with a high impedance type voltmeter. The measurement value may vary depending on the measuring instruments used or on the product. Refer to the voltage dur ing PLAY unless otherwise specified; The value shown in ( ) is the voltage measured at the moment of STOP.

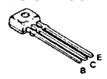
2SA954
2SC2878
2SD1302



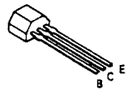
2SD2396



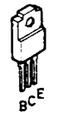
2SA1175
2SC2785



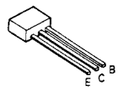
DTA113ZSA
DTA124ESA
DTC124ESA
UN4112
2SC1740S



2SB1370
2SD2061



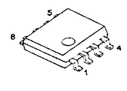
UN4212
UN4219



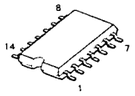
2SB1375
2SD2012

NJM4580E

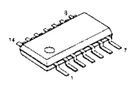
NJM4565M



TC74VHCU04F



LC89170M



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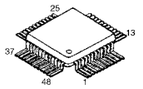
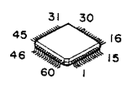


KAN03



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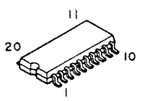

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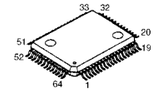
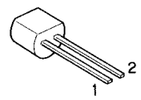


ICP-N10
ICP-N25



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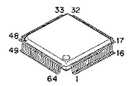
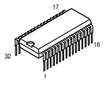


BA5936S



1060CD/DP-R6090/1070CD/DP-R7090/D-R350(K) (1/2)

Y22-7040-10

1060CD/1070CD/DP-R6090/R7090/D-R350

KENWOOD

AE AF AG AH AI AJ AK AL AM AN

1 2 3 4 5 6 7

DISPLAY VNIT
(X25-5900-XX) (A/3) -10 : 1070CD/DP-R7090 -11 : 1060CD/DP-R6090

ED1

1G 2G 3G 4G 5G 6G 7G 8G 9G 10G 11G 12G 13G 14G 15G 16G

P1 P2

(1G-16G)

IC1 : LC75712E
D1-5 : B30-2467-05
ED1 : FIP15XM1BA

IC1
DOT DRIVER
(BOTTOM VIEW)

GRID DRIVER

ANODE DRIVER

CONTROL
INSTRUCTION DECODER
GRID CONTROL
GRID REGISTER
DUTY GENERATOR
DUTYCYCLE REGISTER
DISPLAY CONTROL
DISPLAY REGISTER
BLINK GENERATOR
BLINKCYCLE REGISTER
ADDRESS COUNTER
ADDRESS REGISTER
DECODER
TIMMING GENERATOR
DIVIDER
OSC
SHIFT REGISTER
LATCH
AD RAM
CG RAM
CG ROM
DC RAM

VLOAD TEST VSS OSCO OSC1 VDD RST CE CL DI

-37.0V -14.3V -11.9V -38V -38.0V +5V 4.6V 4.2V 0V 2.1V 4.3V

R26 2.2K C3 33P C1 47u6.3 C2 0.01

CN1
F1 F2 VLOAD NC RST GND +5V REM A/D0 A/D1 A/D2 DISC1 DISC2 DISC3 DISC4 DISC5 DATA CLK CE

X32-333
-CN5
1/3

R27 100 R30 10K R31 10K R32 10K

C6 0.1 C5 0.01

OPEN/ CLOSE S6 R6 4.7K
DISC5 S5 R5 7.5K
DISC4 S4 R4 13K
DISC3 S3 R3 22K
DISC2 S2 R2 43K
DISC1 S1 R1 15K

DISK SKIP S14 R14 4.7K
EDIT S13 R13 7.5K
FB S12 R12 13K
FF S11 R11 22K
DOWN S10 R10 43K
UP S9 R9 15K

REPEAT S20 R20 4.7K
RANDOM S19 R19 7.5K
TIME DISP. S18 R18 13K
P-MODE S17 R17 22K
ALL INFO. S16 R16 43K
TEXT DISP. S15 R15 15K

R29 47K
REMOTE SENSOR
A1

D1 D2 D3 D4 D5 R21 360 R22 820 R23 820 R24 360 R25 820

WH2 RST GND GND E3 E4
C4 0.01
S21 POWER ON POWER OFF
(X25-) (C/3)

WH1 GND A/D1 E1 E2
R7 2.2K
PLAY/ PAUSE S7
STOP S8
R8 680
(X25-) (B/3)

DISPLAY UNIT
(X25-5910-10) (A/3) D-R350

ED1

1G 2G 3G 4G 5G 6G 7G 8G 9G 10G

P1 P2

0V

(1G-16G)

IC1 : LC75712E
D1-5 : B30-2508-05
D6 : B30-2513-05
D7 : 1SS133 or HSS104

Q1 : 2SD1302(S,T)
Q2 : UN4112 or DTA124ESA
Q3 : UN4212 or DTC124ESA

ED1 : FIP15XM1BA

GRID DRIVER

ANODE DRIVER

CONTROL
INSTRUCTION DECODER
GRID CONTROL
GRID REGISTER
DUTY GENERATOR
DUTYCYCLE REGISTER
DISPLAY CONTROL
DISPLAY REGISTER
BLINK GENERATOR
BLINKCYCLE REGISTER
ADDRESS COUNTER
ADDRESS REGISTER
LATCH
AD RAM
CG RAM
CG ROM
DC RAM

-37.0V -14.3V -11.9V -38V +4.2V

CN1
F F VLOAD STANDBY RST GND +4.2V NC A/D0 A/D1 A/D2 LED1 LED2 LED3 LED4 LED5 DATA CLK CE

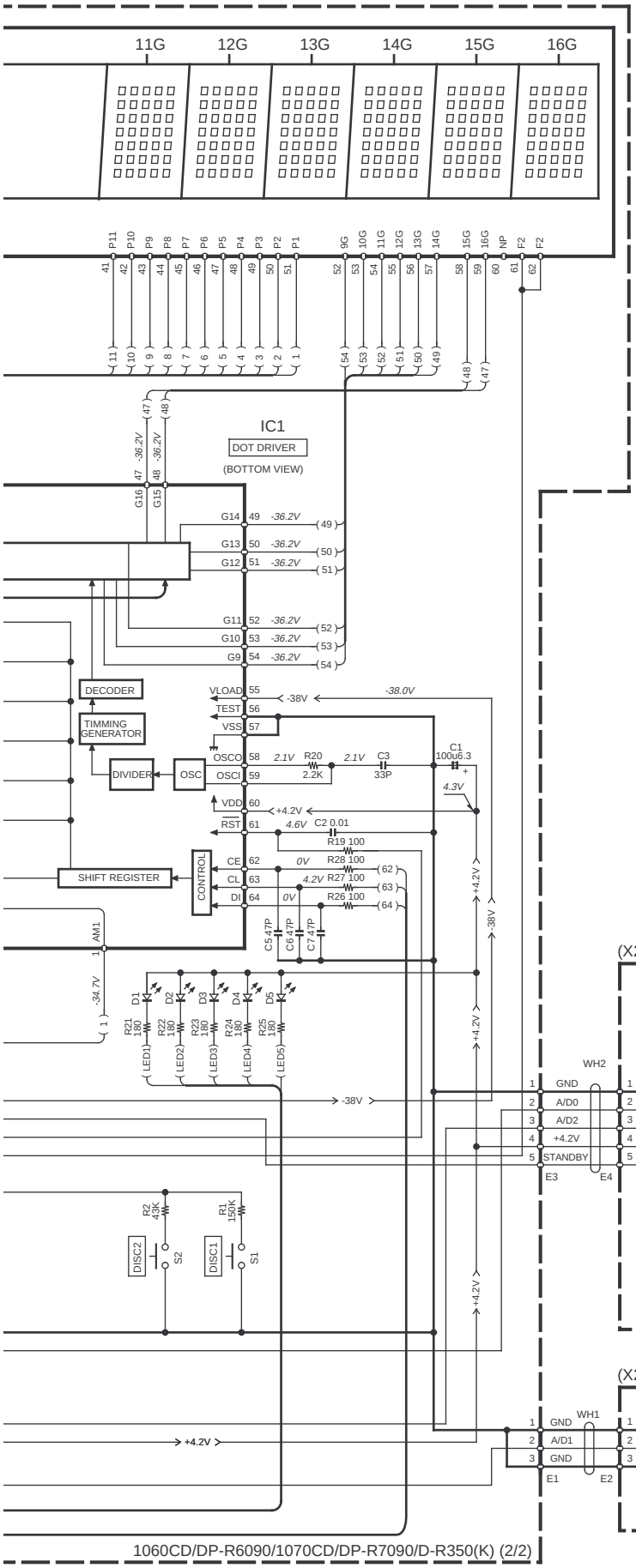
Q1 Q2 Q3 D7 R29 10K R30 10K C4 0.01

OPEN/ CLOSE S6 R6 4.7K
DISC5 S5 R5 7.5K
DISC4 S4 R4 13K
DISC3 S3 R3 22K

DISC SKIP S11 R11 4.7K

R17 10K R16 10K R18 10K

E5

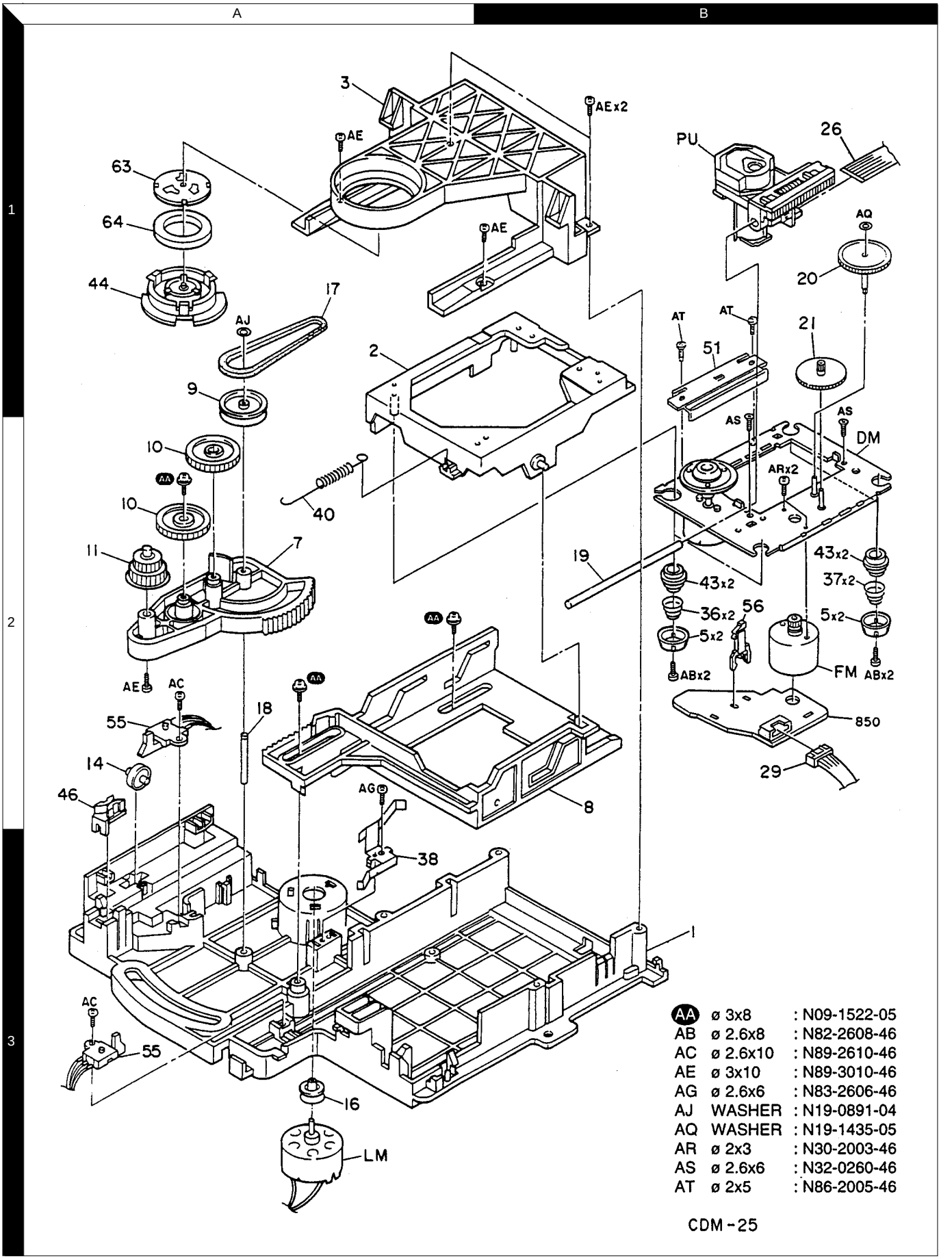


1060CD/DP-R6090/1070CD/DP-R7090/D-R350(K) (2/2)

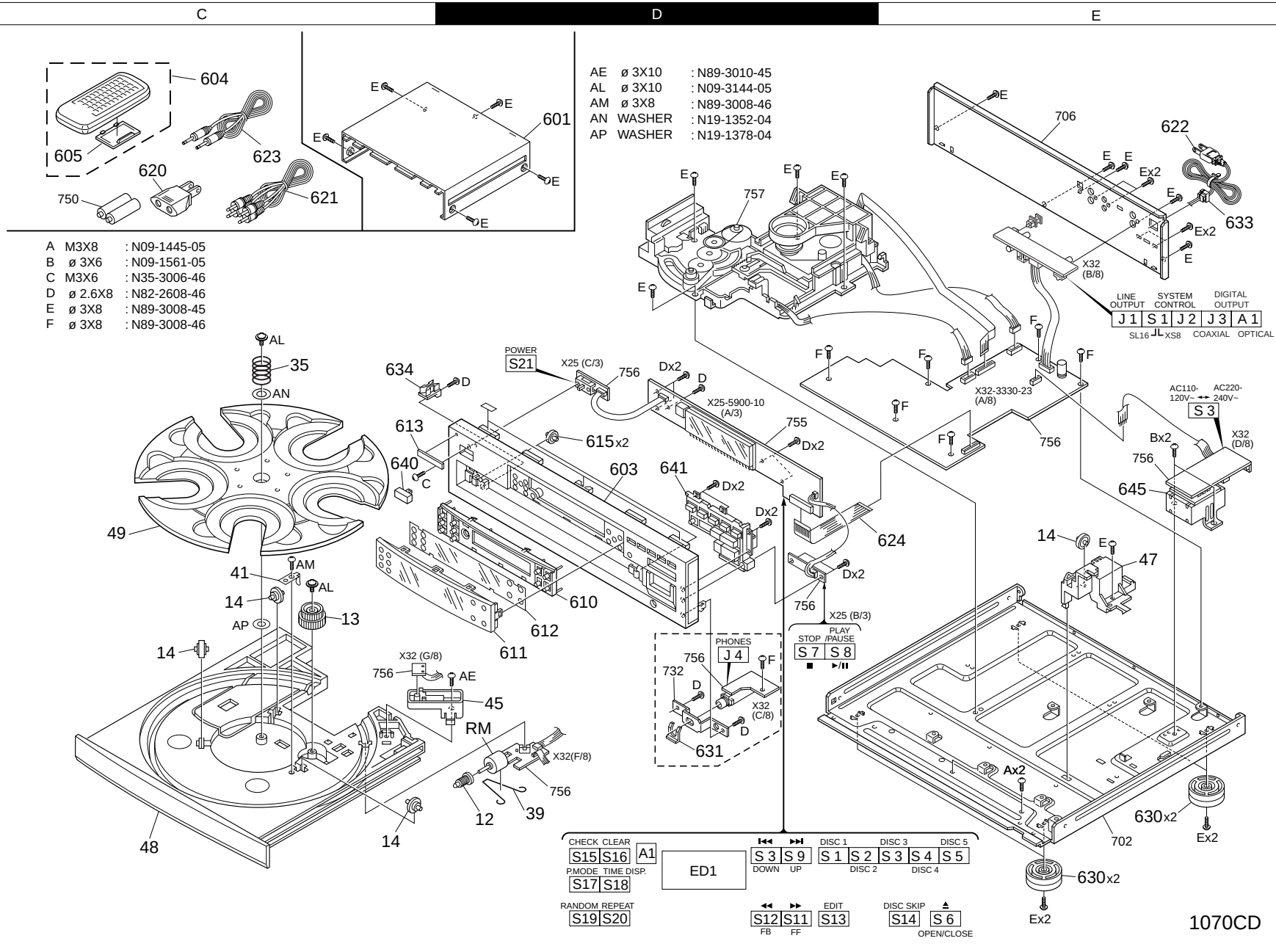
CAUTION: *For continued safety, replace safety critical components only with manufacturer's recommended parts (refer to parts list). ⚠ indicates safety critical components. For continued protection against risk of fire, replace only with same type and rating fuse(s). To reduce the risk of electric shock, leakage-current or resistance measurements shall be carried out (exposed parts are acceptably insulated from the supply circuit) before the appliance is returned to the customer.*

The DC voltage is an actual reading measured with a high impedance type voltmeter. The measurement value may vary depending on the measuring instruments used or on the product. Refer to the voltage dur ing PLAY unless otherwise specified; The value shown in ( ) is the voltage measured at the moment of STOP.

EXPLODED VIEW(MECHANISM)



Parts with exploded numbers larger than 700 are not supplied.



Parts with exploded numbers larger than 700 are not supplied.

Parts with exploded numbers larger than 700 are not supplied.

1060CD/1070CD/DP-R6090/R7090/D-R350

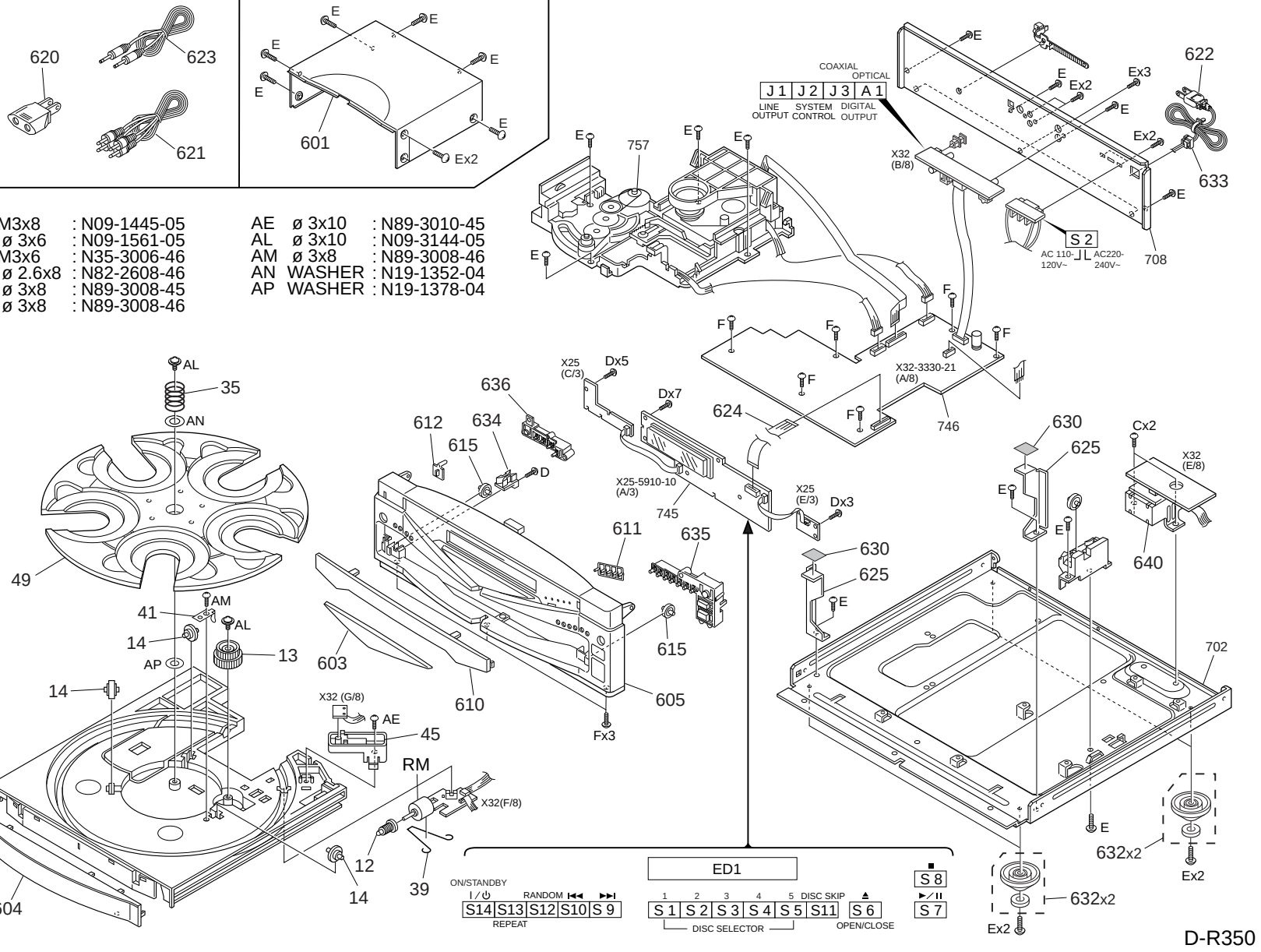
EXPLODED VIEW(UNIT)

F G H

1

2

A	M3x8	: N09-1445-05	AE	ø 3x10	: N89-3010-45
B	ø 3x6	: N09-1561-05	AL	ø 3x10	: N09-3144-05
C	M3x6	: N35-3006-46	AM	ø 3x8	: N89-3008-46
D	ø 2.6x8	: N82-2608-46	AN	WASHER	: N19-1352-04
E	ø 3x8	: N89-3008-45	AP	WASHER	: N19-1378-04
F	ø 3x8	: N89-3008-46			



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❶

Ref. No	Address	New Parts	Parts No.	Description	Destination	Remarks
1060CD/1070CD/DP-R6090/DP-R7090						
601	1D	✻	A01-3289-01	METALLIC CABINET		
603	1D	✻	A60-1149-01	PANEL	K7P7Y7	
603	1D	✻	A60-1150-01	PANEL	T7E7	
603	1D	✻	A60-1151-01	PANEL	K6P6Y6	
603	1D	✻	A60-1152-01	PANEL	M6T6E6	
604	1C	✻	A70-1134-05	REMOTE CONTROLLER(RC-P0601)		
605	1C		A09-0356-08	BATTERY COVER		
610	2D		B07-2294-22	ESCUTCHEON		
611	2D	✻	B10-2364-03	FRONT GLASS		
612	2D		B11-0301-03	COLOR FILTER		
-			B46-0197-00	QUESTIONNAIRE CARD	K6K7	
-			B46-0310-03	WARRANTY CARD	T6E6	
-			B46-0310-03	WARRANTY CARD	T7E7	
-			B46-0328-03	WARRANTY CARD	K6Y6	
-			B46-0328-03	WARRANTY CARD	K7Y7	
-		✻	B46-0336-03	WARRANTY CARD	P6P7	
-			B58-0513-04	CAUTION CARD (PRESET220-240)	Y6Y7	
-			B58-0945-03	CAUTION CARD	T6T7	
-			B58-0964-13	CAUTION CARD (UL)	K6Y6	
-			B58-0964-13	CAUTION CARD (UL)	K7Y7	
-		✻	B58-0965-13	CAUTION CARD (T,XtypePL)	T6T7	
-		✻	B58-0966-13	CAUTION CARD (ELMtypePL)	M6E6E7	
-		✻	B58-0967-03	CAUTION CARD (PtypePL)	P6P7	
-			B59-1104-00	SERVICE DIRECTORY	Y6Y7	
-		✻	B60-3243-00	INSTRUCTION MANUAL(ENGLISH)	K6P6Y6	
-		✻	B60-3243-00	INSTRUCTION MANUAL(ENGLISH)	K7P7Y7	
-		✻	B60-3244-00	INSTRUCTION MANUAL(FRENCH)	P6P7	
-		✻	B60-3245-00	INSTRUCTION MANUAL(ENGLISH)	M6T6T7	
-		✻	B60-3246-00	INSTRUCTION MANUAL(FRN,GER)	E6E7	
-		✻	B60-3247-00	INSTRUCTION MANUAL(DUTCH,ITAL)	E6E7	
-		✻	B60-3248-00	INSTRUCTION MANUAL(SPANISH)	M6E6E7	
-		✻	B60-3249-00	INSTRUCTION MANUAL8(CHINESE)	M6	
615	1D		D14-0357-04	ROLLER		
⚠ 620	1C		E03-0115-05	AC PLUG ADAPTER	M6	
621	1C		E30-0505-05	AUDIO CORD		
⚠ 622	1E		E30-2592-15	AC POWER CORD	M6E6E7	
⚠ 622	1E		E30-2605-05	AC POWER CORD	Y6Y7	
⚠ 622	1E		E30-2650-05	AC POWER CORD	K6P6	
⚠ 622	1E		E30-2650-05	AC POWER CORD	K7P7	
⚠ 622	1E		E30-2721-05	AC POWER CORD	T6T7	
623	1C		E30-2733-05	CORD WITH PLUG		
624	2E		E35-0400-05	WIRING HARNESS		
-			H10-7280-02	POLYSTYRENE FOAMED FIXTURE	K6P6Y6	
-			H10-7280-02	POLYSTYRENE FOAMED FIXTURE	K7P7Y7	
-			H10-7280-02	POLYSTYRENE FOAMED FIXTURE	M6E6E7	
-			H10-7281-02	POLYSTYRENE FOAMED FIXTURE	K6P6Y6	
-			H10-7281-02	POLYSTYRENE FOAMED FIXTURE	K7P7Y7	
-			H10-7281-02	POLYSTYRENE FOAMED FIXTURE	M6E6E7	
-			H10-7282-02	POLYSTYRENE FOAMED FIXTURE	T6T7	
-			H10-7283-02	POLYSTYRENE FOAMED FIXTURE	T6T7	
-			H12-2344-04	PACKING FIXTURE		
-			H13-0163-04	CARTON BOARD	T6T7	

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❷

Ref. No	Address	New Parts	Parts No.	Description	Destination	Remarks
-			H20-0568-04	PROTECTION COVER	M6	
-			H21-0303-04	PROTECTION SHEET		
-			H25-0232-04	PROTECTION BAG (235X350X0.03)	K6P6Y6	
-			H25-0232-04	PROTECTION BAG (235X350X0.03)	K7P7Y7	
-			H25-0232-04	PROTECTION BAG (235X350X0.03)	M6E6E7	
-			H25-0651-04	PROTECTION BAG	T6T7	
-			H25-0661-04	PROTECTION BAG	K6P6Y6	
-			H25-0661-04	PROTECTION BAG	T6E6	
-			H25-0661-04	PROTECTION BAG	7	
-			H50-2414-04	ITEM CARTON CASE	K7P7Y7	
-			H50-2415-04	ITEM CARTON CASE	T7	
-		✻	H50-2416-04	ITEM CARTON CASE	E7	
-		✻	H50-2417-04	ITEM CARTON CASE	K6P6Y6	
-		✻	H50-2418-04	ITEM CARTON CASE	M6	
-		✻	H50-2419-04	ITEM CARTON CASE	T6	
-		✻	H50-2420-04	ITEM CARTON CASE	E6	
630	2E		J02-1151-03	FOOT		
631	2D		J21-3326-05	JACK MOUNTING HARDWARE		
⚠ 633	1E		J42-0083-05	POWER CORD BUSHING		
634	1C		J90-0811-04	GUIDE		
-			J61-0307-05	WIRE BAND		
640	1C		K27-2178-04	KNOB (BUTTON)		
641	1D	✻	K29-6681-24	KNOB ASSY		
⚠ 645	1E	✻	L07-2304-05	POWER TRANSFORMER	K6P6	
⚠ 645	1E	✻	L07-2304-05	POWER TRANSFORMER	K7P7	
⚠ 645	1E	✻	L07-2306-05	POWER TRANSFORMER	Y6M6Y7	
645	1E	✻	L07-2411-05	POWER TRANSFORMER	T6E6	
645	1E	✻	L07-2411-05	POWER TRANSFORMER	T7E7	
D-R350						
601	1F	✻	A01-3440-01	METALLIC CABINET		
603	2F	✻	A21-1964-03	DRESSING PANEL		
604	2F	✻	A29-0858-12	PANEL		
605	2G	✻	A60-1138-21	PANEL	K3P3Y3	
605	2G	✻	A60-1190-21	PANEL	E3I3	
605	2G	✻	A60-1190-21	PANEL	M3X3T3	
612	1G	✻	B12-0313-14	INDICATOR		
610	2G	✻	B10-2353-22	FRONT GLASS		
611	2G	✻	B12-0312-04	INDICATOR		
-			B46-0096-53	WARRANTY CARD	X3	
-			B46-0197-00	QUESTIONNAIRE CARD	K3	
-			B46-0310-03	WARRANTY CARD	T3E3	
-			B46-0328-03	WARRANTY CARD	K3Y3	
-		✻	B46-0336-03	WARRANTY CARD	P3	
-			B58-0513-04	CAUTION CARD (PRESET220-240)	Y3	
-			B58-0945-03	CAUTION CARD	T3	
-			B58-0964-13	CAUTION CARD (UL)	K3Y3	
-		✻	B58-0965-13	CAUTION CARD (T,XtypePL)	X3T3	
-		✻	B58-0966-13	CAUTION CARD (ELMtypepl)	M3E3I3	
-		✻	B58-0967-03	CAUTION CARD (PtypePL)	P3	
-			B59-1104-00	SERVICE DIRECTORY	Y3	
-		✻	B60-3276-00	INSTRUCTION MANUAL(ENGLISH)	I3	
-		✻	B60-3276-00	INSTRUCTION MANUAL(ENGLISH)	K3P3Y3	
-		✻	B60-3276-00	INSTRUCTION MANUAL(ENGLISH)	M3X3T3	

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❸

Ref. No	Address	New Parts	Parts No.	Description	Destination	Remarks
-		✻	B60-3277-00	INSTRUCTION MANUAL(FRENCH)	P3E3	
-		✻	B60-3278-00	INSTRUCTION MANUAL(GER,DUTCH)	E3	
-		✻	B60-3279-00	INSTRUCTION MANUAL(ITAL)	E3	
-		✻	B60-3280-00	INSTRUCTION MANUAL(SPANISH)	M3E3	
-		✻	B60-3281-00	INSTRUCTION MANUAL(TAIWANESE)	M3I3	
615	1G,2G		D14-0357-04	ROLLER		
⚠ 620	1F		E03-0115-05	AC PLUG ADAPTER	M3I3	
622	1H		E30-0505-05	AUDIO CORD		
⚠ 622	1H		E30-2592-15	AC POWER CORD	M3E3I3	
⚠ 622	1H		E30-2605-05	AC POWER CORD	Y3	
⚠ 622	1H		E30-2650-05	AC POWER CORD	K3P3	
⚠ 622	1H		E30-2717-05	AC POWER CORD	X3	
⚠ 622	1H		E30-2829-05	AC POWER CORD	T3	
623	1F		E30-2733-05	CORD WITH PLUG		
625	1H	✻	E35-0400-05	WIRING HARNESS		
630	2H	✻	F31-0279-04	REINFORCING HARDWARE		
-		✻	G11-2333-14	CUSHION		
-		✻	G16-0899-04	SHEET		
-		✻	H10-7294-02	POLYSTYRENE FOAMED FIXTURE	I3	
-		✻	H10-7294-02	POLYSTYRENE FOAMED FIXTURE	K3P3Y3	
-		✻	H10-7294-02	POLYSTYRENE FOAMED FIXTURE	M3X3E3	
-		✻	H10-7295-02	POLYSTYRENE FOAMED FIXTURE	I3	
-		✻	H10-7295-02	POLYSTYRENE FOAMED FIXTURE	K3P3Y3	
-		✻	H10-7295-02	POLYSTYRENE FOAMED FIXTURE	M3X3E3	
-		✻	H10-7296-02	POLYSTYRENE FOAMED FIXTURE	T3	
-		✻	H10-7297-02	POLYSTYRENE FOAMED FIXTURE	T3	
-		✻	H13-0260-04	CARTON BOARD	X3	
-			H20-0568-04	PROTECTION COVER	M3I3	
-		✻	H21-0351-04	PROTECTION SHEET		
-			H25-0232-04	PROTECTION BAG (235X350X0.03)	I3	
-			H25-0232-04	PROTECTION BAG (235X350X0.03)	K3P3Y3	
-			H25-0232-04	PROTECTION BAG (235X350X0.03)	M3X3E3	
-			H25-0651-04	PROTECTION BAG	T3	
-			H25-0661-04	PROTECTION BAG	K3P3Y3	
-			H25-0661-04	PROTECTION BAG	X3T3E3	
-		✻	H30-0602-04	ADHESIVE DOUBLE-COATED TAPE		
-		✻	H50-2377-04	ITEM CARTON CASE	K3P3Y3	
-		✻	H50-2377-04	ITEM CARTON CASE	X3E3	
-		✻	H50-2378-04	ITEM CARTON CASE	M3I3	
-		✻	H50-2379-04	ITEM CARTON CASE	T3	
632	2H		J02-1189-13	FOOT		
⚠ 633	1H		J42-0083-05	POWER CORD BUSHING		
634	1G		J90-0811-04	GUIDE		
-			J61-0101-05	WIRE BAND		
-			J61-0307-05	WIRE BAND		
635	2G	✻	K29-6648-12	KNOB		
636	2G	✻	K29-6649-02	KNOB		
⚠ 640	2H	✻	L07-2304-05	POWER TRANSFORMER	K3P3	
⚠ 640	2H	✻	L07-2306-05	POWER TRANSFORMER	Y3M3I3	
⚠ 640	2H	✻	L07-2411-05	POWER TRANSFORMER	X3T3E3	

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❹

Ref. No	Address	New Parts	Parts No.	Description	Destination	Remarks
DISPLAY UNIT (X25-590x-xx) for 1060CD/1070CD/DP-R6090/DP-R7090						
D1-5			B30-2467-05	LED		
C1			C90-3212-05	ELECTRO 47UF 6.3WV		
C2			CK45FF1H103ZMU	CERAMIC 0.010UF Z		
C3			CC45FSL1H330JM	CERAMIC 33PF J		
C4,5			CK45FF1H103ZMU	CERAMIC 0.010UF Z		
C6			CF92FV1H104J	MF-C 0.10UF J		
CN1			E40-4944-05	FLAT CABLE CONNECTOR		
-			J19-5789-04	HOLDER		
S1-5			S70-0802-05	TACT SWITCH		
S6-20			S70-0031-05	TACT SWITCH		
S21			S40-2351-05	PUSH SWITCH		
ED1			FIP15XM1BA	INDICATOR TUBE		
IC1			LC75712E	MOS-IC		
A1			W02-2537-05	ELECTRIC CIRCUIT MODULE		
DISPLAY UNIT (X25-591x-xx) for D-R350						
D1-5		✻	B30-2508-05	LED(AMBER,D=3,P=2)		
D6			B30-2513-05	LED(RED)		
C1			C90-3222-05	ELECTRO 100UF 10WV		
C2			CK45FF1H103ZMU	CERAMIC 0.010UF Z		
C3			CC45FSL1H330JM	CERAMIC 33PF J		
C4			CF92FV1H104J	MF-C 0.10UF J		
C5-7			CC45FSL1H470JM	CERAMIC 47PF J		
CN1			E40-4944-05	FLAT CABLE CONNECTOR		
			J19-5789-04	HOLDER		
E5			J11-0809-05	WIRE CLAMPER		
S1-14			S70-0031-05	TACT SWITCH		
D7,8			HSS104	DIODE		
D7,8			1SS133	DIODE		
ED1			FIP15XM1BA	INDICATOR TUBE		
IC1			LC75712E	MOS-IC		
Q1			2SD1302(S,T)	TRANSISTOR		
Q2			DTA124ESA	DIGITAL TRANSISTOR		
Q2			UN4112	DIGITAL TRANSISTOR		
Q3			DTC124ESA	DIGITAL TRANSISTOR		
Q3			UN4212	DIGITAL TRANSISTOR		
CD PLAYER UNIT (X32-333x-xx)						
C1			CK73FB1H103K	CHIP C 0.010UF K		
C2			CK73FB1H473K	CHIP C 0.047UF K		
C3			CK73FB1E104K	CHIP C 0.10UF K		
C4			CC73FSL1H470J	CHIP C 47PF J		
C5			CE04KW1A101M	ELECTRO 100UF 10WV		
C6-8			CK73FB1E104K	CHIP C 0.10UF K		
C9			CK73FB1H102K	CHIP C 1000PF K		
C10			CC73FSL1H221J	CHIP C 220PF J		

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C11			CK73FB1H473K	CHIP C	0.047UF	K		
C12			CE04KW1C100M	ELECTRO	10UF	16WV		
C13			CK73FB1H393K	CHIP C	0.039UF	K		
C14			CK73FB1H103K	CHIP C	0.010UF	K		
C15			CC73FSL1H151J	CHIP C	150PF	J		
C16			CE04HW1E100M	NP-ELEC	10UF	25WV		
C17			CK73FB1H103K	CHIP C	0.010UF	K		
C18			CK73FB1H333K	CHIP C	0.033UF	K		
C19			CE04KW1A101M	ELECTRO	100UF	10WV		
C20,21			CK73FB1H103K	CHIP C	0.010UF	K		
C22			CK73FB1H333K	CHIP C	0.033UF	K		
C23			CK73FB1H103K	CHIP C	0.010UF	K		
C24			CK73FB1H222K	CHIP C	2200PF	K		
C25			CK73FB1H103K	CHIP C	0.010UF	K		
C26			CC73FSL1H680J	CHIP C	68PF	J		
C27			C90-3222-05	ELECTRO	100UF	10WV		
C28			CK73FB1H223K	CHIP C	0.022UF	K		
C29			CK73FB1H102K	CHIP C	1000PF	K		
C30			CK73FB1H103K	CHIP C	0.010UF	K		
C31			CE04KW1A101M	ELECTRO	100UF	10WV		
C32			CK73FB1E104K	CHIP C	0.10UF	K		
C33			CK73FB1H473K	CHIP C	0.047UF	K		
C34			CK73FB1H152K	CHIP C	1500PF	K		
C35			CK73FB1H103K	CHIP C	0.010UF	K		
C36			CK73FB1E104K	CHIP C	0.10UF	K		
C37			CK73FB1H332K	CHIP C	3300PF	K		
C38			CK73FB1H103K	CHIP C	0.010UF	K		
C39			CK73FB1C224K	CHIP C	0.22UF	K		
C40			CK73FB1E104K	CHIP C	0.10UF	K		
C41			CE04KW1A101M	ELECTRO	100UF	10WV		
C42			CK73FB1H103K	CHIP C	0.010UF	K		
C43,44			CC73FSL1H221J	CHIP C	220PF	J		
C45			CK73FB1H103K	CHIP C	0.010UF	K		
C46,47			CK73FB1E104K	CHIP C	0.10UF	K		
C48			CE04KW1C100M	ELECTRO	10UF	16WV		
C49,50			CE04KW1A101M	ELECTRO	100UF	10WV		
C51			C90-3215-05	ELECTRO	220UF	6.3WV		
C52			CK73FB1E104K	CHIP C	0.10UF	K		
C53,54			CC73FSL1H150J	CHIP C	15PF	J	3/6	
C55			CK73FB1H102K	CHIP C	1000PF	K	7	
C56			CK73FB1H103K	CHIP C	0.010UF	K		
C57,58			C90-3216-05	ELECTRO	330UF	6.3WV		
C59,60			CC73FSL1H151J	CHIP C	150PF	J	3/6	
C61			C90-3216-05	ELECTRO	330UF	6.3WV	7	
C62			CC73FSL1H470J	CHIP C	47PF	J	3/6	
C63,64			CK73FB1H102K	CHIP C	1000PF	K	7	
C65,66			CC73FSL1H470J	CHIP C	47PF	J	7	
C67			C90-3215-05	ELECTRO	220UF	6.3WV	7	
C68-72			CK73FB1H103K	CHIP C	0.010UF	K	7	
C73			CC73FSL1H330J	CHIP C	33PF	J	7	
C74			CC73FSL1H560J	CHIP C	56PF	J	7	
C75-78			CE04KW0J331M	ELECTRO	330UF	6.3WV	7	
C79-82			CK45FF1H103ZMU	CERAMIC	0.010UF	Z	7	
C83-86			CC73FSL1H221J	CHIP C	220PF	J	7	
C87-90			CC73FSL1H470J	CHIP C	47PF	J	7	

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C91,92			CC73FSL1H471J	CHIP C	470PF	J	7	
C93-96			CC45FSL1H121JM	CERAMIC	120PF	J	3	
C93-96			CC45FSL1H820JM	CERAMIC	82PF	J	6	
C93-96			CQ93FMG1H512J	MYLAR	5100PF	J	7	
C97,98			CQ93FMG1H273J	MYLAR	0.027UF	J		
C99,100			CQ93FMG1H332J	MYLAR	3300PF	J		
C101,102			CE04KW1A470M	ELECTRO	47UF	10WV		
C103,104			CK73FB1H103K	CHIP C	0.010UF	K		
C105,106			CK73FB1H103K	CHIP C	0.010UF	K	6/7	
C107,108			CC73FSL1H821J	CHIP C	820PF	J		
C109,110			CE04KW1H010M	ELECTRO	1.0UF	50WV	6/7	
C111,112			CE04KW1A101M	ELECTRO	100UF	10WV	6/7	
C113,114			CK73FB1H102K	CHIP C	1000PF	K	6/7	
C116			CK73FB1H103K	CHIP C	0.010UF	K	6/7	
C117,118			CK73FB1H103K	CHIP C	0.010UF	K		
C119,120			CK73FB1H103K	CHIP C	0.010UF	K	7	
C121			CE04KW0J331M	ELECTRO	330UF	6.3WV		
C125			CK73FB1H103K	CHIP C	0.010UF	K	7	
C126,127			CK45FF1H103ZMU	CERAMIC	0.010UF	Z		
C128			CE04KW1C332M	ELECTRO	3300UF	16WV		
C129			CK73FB1H103K	CHIP C	0.010UF	K		
C130			CE04KW1A331M	ELECTRO	330UF	10WV		
C131			CE04DW1E331M	ELECTRO	330UF	25WV		
C132			CE04DW1J101M	ELECTRO	100UF	63WV		
C133			CK73FB1H103K	CHIP C	0.010UF	K		
C134			CE04KW1H100M	ELECTRO	10UF	50WV		
C135			CE04KW1C100M	ELECTRO	10UF	16WV		
C136-138			CK73FB1H103K	CHIP C	0.010UF	K		
C141,142			CK73FB1H103K	CHIP C	0.010UF	K		
C143-145			CC73FSL1H470J	CHIP C	47PF	J	7	
C146,147			CK73FB1H103K	CHIP C	0.010UF	K	7	
C148			CK73FB1H102K	CHIP C	1000PF	K	7	
C149			CK73FB1H103K	CHIP C	0.010UF	K	3	
C150			CK73FB1H103K	CHIP C	0.010UF	K	7	
C151			CK73FB1E104K	CHIP C	0.10UF	K		
CN1			E40-8037-05	FLAT CABLE CONNECTOR				
CN2			E40-0711-05	PIN ASSY				
CN3			E40-3250-05	PIN ASSY				
CN4			E40-3252-05	PIN ASSY				
CN5			E40-4187-05	FLAT CABLE CONNECTOR				
CN6			E40-4906-05	FLAT CABLE CONNECTOR				
CN7			E40-4297-05	FLAT CABLE CONNECTOR				
CN8			E40-4245-05	PIN ASSY			3	
CN9			E40-4187-05	FLAT CABLE CONNECTOR				
CN10			E40-4245-05	PIN ASSY			6/7	
J1			E63-1009-05	PHONO JACK				
J2			E11-0293-05	MINIATURE PHONE JACK(2P)				
J3			E63-0199-05	PHONO JACK				
J4			E11-0127-05	PHONE JACK (3P)			6/7	
E9-11			J11-0808-05	WIRE CLAMPER				
E12			J11-0809-05	WIRE CLAMPER				
E13			J11-0808-05	WIRE CLAMPER			6/7	
L1			L40-1001-17	SMALL FIXED INDUCTOR(10UH,K)				

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L3,4			L40-1091-17	SMALL FIXED INDUCTOR	6/7	
L11,12			L40-1001-17	SMALL FIXED INDUCTOR(10UH,K)	6/7	
X1			L77-2217-05	CRYSTAL RESONATOR(16.9344MHZ)	3/6	
X2			L77-2217-05	CRYSTAL RESONATOR(16.9344MHZ)	7	
X3			L78-0284-05	RESONATOR (5MHZ)		
R1-4			RK73FB2A683J	CHIP R 68K J 1/10W		
R5			RK73FB2A753J	CHIP R 75K J 1/10W		
R6			RK73FB2A104J	CHIP R 100K J 1/10W		
R7			RK73FB2A101J	CHIP R 100 J 1/10W		
R8			RK73FB2A103J	CHIP R 10K J 1/10W		
R9			RK73FB2A334J	CHIP R 330K J 1/10W		
R10			RK73FB2A473J	CHIP R 47K J 1/10W		
R11			RK73FB2A104J	CHIP R 100K J 1/10W		
R12			RK73FB2A242J	CHIP R 2.4K J 1/10W		
R13			RK73FB2A682J	CHIP R 6.8K J 1/10W		
R14			RK73FB2A101J	CHIP R 100 J 1/10W		
R16			RK73FB2A684J	CHIP R 680K J 1/10W		
R17			RK73FB2A103J	CHIP R 10K J 1/10W		
R18			RK73FB2A105J	CHIP R 1.0M J 1/10W		
R19,20			RK73FB2A114J	CHIP R 110K J 1/10W		
R21,22			RK73FB2A155J	CHIP R 1.5M J 1/10W		
R23			RK73FB2A394J	CHIP R 390K J 1/10W		
R24			RK73FB2A563J	CHIP R 56K J 1/10W		
R25			RK73FB2A103J	CHIP R 10K J 1/10W		
R26			RK73FB2A104J	CHIP R 100K J 1/10W		
R27			RK73FB2A223J	CHIP R 22K J 1/10W		
R28			RK73FB2A154J	CHIP R 150K J 1/10W		
R29			RK73FB2A752J	CHIP R 7.5K J 1/10W		
R30,31			RK73FB2A472J	CHIP R 4.7K J 1/10W		
R32			RK73FB2A183J	CHIP R 18K J 1/10W		
R33			RK73FB2A154J	CHIP R 150K J 1/10W		
R34			RK73FB2A103J	CHIP R 10K J 1/10W		
R35			RK73FB2A244J	CHIP R 240K J 1/10W		
R36			RK73FB2A152J	CHIP R 1.5K J 1/10W		
R37			RK73FB2A103J	CHIP R 10K J 1/10W		
R38			RK73FB2A102J	CHIP R 1.0K J 1/10W		
R39			RK73FB2A100J	CHIP R 10 J 1/10W		
R40			RK73FB2A224J	CHIP R 220K J 1/10W		
R41			RK73FB2A105J	CHIP R 1.0M J 1/10W		
R42			RK73FB2A472J	CHIP R 4.7K J 1/10W		
R43			RK73FB2A623J	CHIP R 62K J 1/10W		
R44			RK73FB2A912J	CHIP R 9.1K J 1/10W		
R45,46			RK73FB2A203J	CHIP R 20K J 1/10W		
R47			RK73FB2A104J	CHIP R 100K J 1/10W		
R48			RK73FB2A332J	CHIP R 3.3K J 1/10W		
R49			RK73FB2A103J	CHIP R 10K J 1/10W		
R50			RK73FB2A332J	CHIP R 3.3K J 1/10W		
R51			RK73FB2A105J	CHIP R 1.0M J 1/10W		
R52			RK73FB2A104J	CHIP R 100K J 1/10W		
R53-55			RK73FB2A471J	CHIP R 470 J 1/10W		
R56			RK73FB2A221J	CHIP R 220 J 1/10W		
R57			RK73FB2A131J	CHIP R 130 J 1/10W		
R58			RK73FB2A220J	CHIP R 22 J 1/10W		

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R59			RK73FB2A750J	CHIP R 75 J 1/10W		
R60-67			RK73FB2A471J	CHIP R 470 J 1/10W		
R68			RK73FB2A473J	CHIP R 47K J 1/10W		
R69,70			RK73FB2A472J	CHIP R 4.7K J 1/10W		
R71			RK73FB2A473J	CHIP R 47K J 1/10W		
R72			RK73FB2A471J	CHIP R 470 J 1/10W		
R73-75			RK73FB2A473J	CHIP R 47K J 1/10W		
R76			RK73FB2A103J	CHIP R 10K J 1/10W		
R77			RK73FB2A752J	CHIP R 7.5K J 1/10W		
R78			RK73FB2A682J	CHIP R 6.8K J 1/10W		
R79			RK73FB2A473J	CHIP R 47K J 1/10W	6/7	
R80			RK73FB2A473J	CHIP R 47K J 1/10W	3/7	
R81			RK73FB2A473J	CHIP R 47K J 1/10W		
R83,84			RK73FB2A331J	CHIP R 330 J 1/10W		
R85-88			RK73FB2A104J	CHIP R 100K J 1/10W		
R89			RK73FB2A103J	CHIP R 10K J 1/10W		
R90,91			RK73FB2A181J	CHIP R 180 J 1/10W		
R92			RK73FB2A103J	CHIP R 10K J 1/10W		
R93			RK73FB2A105J	CHIP R 1.0M J 1/10W		
R94			RK73FB2A221J	CHIP R 220 J 1/10W	3/6	
R95-102			RK73FB2A103J	CHIP R 10K J 1/10W	3/6	
R103,104			RK73FB2A392J	CHIP R 3.9K J 1/10W	7	
R105,106			RK73FB2A102J	CHIP R 1.0K J 1/10W	7	
R107-110			RK73FB2A101J	CHIP R 100 J 1/10W	7	
R111			RK73FB2A101J	CHIP R 100 J 1/10W		
R112,113			RK73FB2A471J	CHIP R 470 J 1/10W	7	
R114			RK73FB2A180J	CHIP R 18 J 1/10W	7	
R115			RK73FB2A105J	CHIP R 1.0M J 1/10W	7	
R117			RK73FB2A220J	CHIP R 22 J 1/10W	6/7	
R118			RK73FB2A510J	CHIP R 51 J 1/10W	6/7	
R119-126			RK73FB2A331J	CHIP R 330 J 1/10W	7	
R127-134			R92-1858-05	CHIP R 3.6K F 1/10W	7	
R135-138			RK73FB2A332J	CHIP R 3.3K J 1/10W	7	
R139-142			RK73FB2A333J	CHIP R 33K J 1/10W	7	
R143-146			RK73FB2A152J	CHIP R 1.5K J 1/10W	7	
R147			RK73FB2A471J	CHIP R 470 J 1/10W	7	
R147-150			RK73FB2A243J	CHIP R 24K J 1/10W	3	
R147-150			RK73FB2A393J	CHIP R 39K J 1/10W	6	
R151-156			RK73FB2A471J	CHIP R 470 J 1/10W		
R157,158			RK73FB2A104J	CHIP R 100K J 1/10W		
R159,160			RK73FB2A101J	CHIP R 100 J 1/10W		
R161			RS14KB3D470J	FL-PROOF RS 47 J 2W	3/6	
R161			RS14KB3D560J	FL-PROOF RS 56 J 2W	7	
R163,164			RK73FB2A472J	CHIP R 4.7K J 1/10W		
R165,166			RK73FB2A102J	CHIP R 1.0K J 1/10W		
R167,168			RK73FB2A101J	CHIP R 100 J 1/10W		
R169,170			RK73FB2A104J	CHIP R 100K J 1/10W	6/7	
R171,172			RK73FB2A510J	CHIP R 51 J 1/10W	6/7	
R173,174			RK73FB2A102J	CHIP R 1.0K J 1/10W	6/7	
R176-178			RS14KB3D560J	FL-PROOF RS 56 J 2W	7	
R179			RK73FB2A331J	CHIP R 330 J 1/10W		
R180			RK73FB2A472J	CHIP R 4.7K J 1/10W		
R181			RK73FB2A103J	CHIP R 10K J 1/10W		

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R182,183			RK73FB2A101J	CHIP R	100	J	1/10W		
R184			RK73FB2A103J	CHIP R	10K	J	1/10W		
R185,186			RD14NB2E1R0J	RD	1	J	1/4W		
R187,188			RK73FB2A152J	CHIP R	1.5K	J	1/10W		
R189,190			RK73FB2A912J	CHIP R	9.1K	J	1/10W		
R191			RK73FB2A101J	CHIP R	100	J	1/10W		
R192			RK73FB2A151J	CHIP R	150	J	1/10W	7	
R193			RK73FB2A221J	CHIP R	220	J	1/10W		
R194			RK73FB2A471J	CHIP R	470	J	1/10W	7	
R195,196			RK73FB2A220J	CHIP R	22	J	1/10W	3/6	
R195,196			RK73FB2A510J	CHIP R	51	J	1/10W	7	
R197,198			RK73FB2A101J	CHIP R	100	J	1/10W		
R199,200			RK73FB2A102J	CHIP R	1.0K	J	1/10W		
R201,202			RK73FB2A621J	CHIP R	620	J	1/10W	7	
R203,204			RK73FB2A100J	CHIP R	10	J	1/10W	6/7	
R205,206			RK73FB2A102J	CHIP R	1.0K	J	1/10W	6/7	
R207,208			RK73FB2A102J	CHIP R	1.0K	J	1/10W	7	
R209-213			RK73FB2A102J	CHIP R	1.0K	J	1/10W		
R214			RK73FB2A102J	CHIP R	1.0K	J	1/10W	7	
VR1			R12-3687-05	TRIMMING POT.(33K)					
VR2			R12-3688-05	TRIMMING POT.(47K)					
VR3			R12-3687-05	TRIMMING POT.(33K)					
S1			S31-2132-05	SLIDE SWITCH				6/7	
⚠ S2			S31-2131-05	SLIDE SWITCH (POWER TYPE)				Y3M3	
⚠ S3			S31-2131-05	SLIDE SWITCH (POWER TYPE)				Y6M6Y7	
PH1			T95-0145-05	OPTO ISOLATOR					
D1-14			HSS104A	DIODE					
D1-14			1SS131	DIODE					
D21			D3SBA20F03	DIODE					
D21			RBV-402LFA	DIODE					
D22,23			S5688B	DIODE					
D22,23			1SR139-400	DIODE					
D24			MTZJ10(B)	ZENER DIODE					
D24			UZ-10BSB	ZENER DIODE					
D25,26			MTZJ20(B)	ZENER DIODE					
D25,26			UZ-20BS	ZENER DIODE					
D27			MTZJ15(B)	ZENER DIODE					
D27			UZ-15BSB	ZENER DIODE					
D28-30			S5688B	DIODE					
D28-30			1SR139-400	DIODE					
D31			SIR-33ST3	INFRARED LED					
IC1			CXA1782BQ*1	ANALOGUE IC					
IC2			CXD2507AQ*1	MOS-IC					
IC3		✻	UPD78055GC-A03	MI-COM IC					
IC4			W24257S-70LL	MEMORY IC					
IC5			TC74HC373AF	IC(8 bit LATCH)					
IC6			LC89170M	MOS-IC					
IC7			KAN03	CUSTOM IC					
IC8			ICP-N25	ANALOGUE IC					
IC11			KAN05	CUSTOM IC				7	
IC12		✻	TC74VHCU04F	MOS-IC				7	
IC13-16		✻	TC74VHC74FE	MOS-IC				7	
IC17,18			NJM4565M	IC(OP AMP X2)				7	

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Y : PX(Far East, Hawaii) **T :** Europe **E :** Europe **G :** Germany
Y : AAFES(Europe) **X :** Australia **M :** Other Areas

⚠ indicates safety critical components.

✻ New Parts
Parts without **Parts No.** are not supplied.
Les articles non mentionnes dans le **Parts No.** ne sont pas fournis.
Teile ohne **Parts No.** werden nicht geliefert.

⑩

Ref. No	Address	New Parts	Parts No.	Description	Destination	Remarks
IC19,20			NJM4565M	IC(OP AMP X2)		
IC21			NJM4580E	ANALOGUE IC	6/7	
IC22			BA5936S	ANALOGUE IC		
IC23			PST993D-T	ANALOGUE IC		
IC24			ICP-N10	ANALOGUE IC		
PH2			RPT-38PT3F	PHOTO TRANSISTOR		
Q1			2SC1740S(Q,R)	TRANSISTOR		
Q1			2SC2785(F,E)	TRANSISTOR		
Q2			2SA954(L,K)	TRANSISTOR		
Q3,4			DTA124ESA	DIGITAL TRANSISTOR		
Q3,4			UN4112	DIGITAL TRANSISTOR		
Q5-9			DTC113ZSA	DIGITAL TRANSISTOR		
Q5-9			UN4219	DIGITAL TRANSISTOR		
Q10,11			DTC124ESA	DIGITAL TRANSISTOR		
Q10,11			UN4212	DIGITAL TRANSISTOR		
Q12			DTC113ZSA	DIGITAL TRANSISTOR	3	
Q12			UN4219	DIGITAL TRANSISTOR	3	
Q13,14			DTA124ESA	DIGITAL TRANSISTOR		
Q13,14			UN4112	DIGITAL TRANSISTOR		
Q15,16			DTC124ESA	DIGITAL TRANSISTOR		
Q15,16			UN4212	DIGITAL TRANSISTOR		
Q17,18			2SC2878(B)	TRANSISTOR		
Q19			2SB1370	TRANSISTOR		
Q19			2SB1375	TRANSISTOR		
Q20,21			2SD2012	TRANSISTOR	3/6	
Q20,21			2SD2061	TRANSISTOR	3/6	
Q20,21			2SD2396(J,K)	TRANSISTOR	7	
Q22			2SA954(L,K)	TRANSISTOR		
Q23			2SC1740S(Q,R)	TRANSISTOR		
Q23			2SC2785(F,E)	TRANSISTOR		
Q24			2SA1175(F,E)	TRANSISTOR		
Q24			2SA933AS(Q,R)	TRANSISTOR		
Q25,26			2SC2878(B)	TRANSISTOR		
Q27,28			2SC2878(B)	TRANSISTOR	6/7	
Q29,30			DTC124ESA	DIGITAL TRANSISTOR	7	
Q29,30			UN4212	DIGITAL TRANSISTOR	7	
Q31			DTA113ZSA	DIGITAL TRANSISTOR	7	
Q31			UN4119	DIGITAL TRANSISTOR	7	
A1			W02-1114-05	OSCILLATING MODULE		
CD MECHANISM (X92-193x-xx) CDM-25						
1	3B	✻	A10-3121-42	CHASSIS ASSY		
2	1A	✻	A11-1048-12	SUB CHASSIS		
3	1A	✻	A11-1017-22	SUB CHASSIS		
5	2B	✻	B09-0250-04	CAP		
7	2A	✻	D10-3439-13	ARM		
8	2B	✻	D10-3438-12	SLIDER		
9	1A	✻	D13-1577-14	GEAR		
10	2A	✻	D13-1578-04	GEAR		
11	2A	✻	D13-1579-04	GEAR		
12	3D	✻	D13-1682-04	WORM		
13	2C	✻	D13-1581-04	GEAR		
14	2C,2E	✻	D14-0357-04	ROLLER		
16	3A	✻	D15-0359-04	PULLEY		

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1060CD/1070CD/DP-R6090/R7090/D-R350
PARTS LIST

✻ New Parts
Parts without **Parts No.** are not supplied.
Les articles non mentionnes dans le **Parts No.** ne sont pas fournis.
Teile ohne **Parts No.** werden nicht geliefert.

Ref. No	Address	New Parts	Parts No.	Description	Destination	Remarks
17	1A	✻	D16-0355-03	BELT		
18	2A	✻	D21-1763-14	SHAFT		
19	2B		D10-3659-04	ROD		
20	1B		D13-1765-03	GEAR		
21	1B		D13-1763-04	GEAR		
25	3D	✻	E35-0747-25	FLAT CABLE		
26	1B	✻	E35-1317-05	FLAT CABLE		
27	2B		E40-3264-05	PIN ASSY		
29	2B	✻	E35-1669-05	WIRING HARNESS		
35	2C	✻	G01-3630-14	COMPRESSION SPRING		
36	2B	✻	G01-3753-04	COMPRESSION SPRING		
37	2B	✻	G01-3754-04	COMPRESSION SPRING		
38	3A	✻	G02-1049-04	FLAT SPRING		
39	3D	✻	G09-0634-04	WIRE SPRING		
41	2D	✻	G02-1065-04	FLAT SPRING		
43	2B	✻	J02-1121-04	INSULATOR		
44	1A	✻	J11-0198-13	CLAMPER		
45	3D	✻	J19-3634-04	HOLDER		
46	2A	✻	J90-0811-04	GUIDE		
47	2E	✻	J90-0810-32	GUIDE	6/7	
47	2E	✻	J90-0834-02	GUIDE	3	
48	3C	✻	J99-0575-01	TRAY	3	
48	3C	✻	J99-0579-01	TRAY	6/7	
49	2C	✻	J99-0547-01	TRAY		
51	1B		J90-0844-03	GUIDE		
55	2A,3A		S33-2061-05	LEVER SWITCH		
56	2B		S74-0065-05	LEAF SWITCH		
63	1A		T50-1055-04	YOKE		
64	1A	✻	T99-0544-15	MAGNET		
DM	2B		A11-1114-08	DISC MOTOR ASSY		
FM	2B		T42-0872-08	FEED MOTOR ASSY		
LM	3A		T42-0524-05	DC MOTOR		
PU	1B		T25-0050-05	PICK UP		
RM	3D		T42-0670-15	DC MOTOR	3	
RM	3D	✻	T42-0828-05	DC MOTOR	6/7	

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⚠ indicates safety critical components.

The method that parts list (Description) is read.
The model and Description that you repair by the following table are able to judge.

Model name	Description								
	Common	K	P	Y	M	X	T	E	I
1060CD	6	K6	P6	Y6	-	-	-	-	-
DP-R6090		-	-	-	M6	-	T6	E6	
1070CD	7	K7	P7	Y7	-	-	-	-	-
DP-R7090		-	-	-	-	-	T7	E7	-
D-R350	3	K3	P3	Y3	M3	X3	T3	E3	I3

1060CD is the model name to sell in North America and Milli tally of DPR6090
1070CD is the model name to sell in North America and Milli tally of DPR7090

SPECIFICATIONS

DP-R7090

[Format]

System .....Compact disc digital audio system
Laser .....Semiconductor laser

[D/A Convertors]

D/A Conversion .....1 Bit (24 Bit Fine D.R.I.V.E.)
Oversampling .....32 fs (1411.2 kHz)

[Audio]

Frequency response .....4Hz ~ 20 kHz, ± 0.5 dB
Signal to noise ratio.....More than 110 dB
Dynamic range .....More than 100 dB
Total harmonic distortion + noise
.....Less than 0.003 % (at 1 kHz)
Channel separation .....More than 100 dB (at 1 kHz)
Wow & flutter ..... Unmeasurable Limit
Output level / impedance
Variable .....(Max.) 2 V / 0.8 kΩ
Digital output
Coaxial .....0.5 V p-p / 75 Ω
Optical .....-15 dBm ~ -21 dBm
(Wave length 660 nm)
Headphone output (Max.).....20 mW (32 Ω)

[General]

Power consumption .....14 W
Dimensions .....W : 440 mm (17-5/16")
H : 125 mm (4-15/16")
D : 397 mm (15-5/8")
Weight (Net).....5.0 kg (11.0 lb)

DP-R6090

[Format]

System .....Compact disc digital audio system
Laser .....Semiconductor laser

[D/A Convertors]

D/A Conversion .....1 Bit (D.R.I.V.E.)
Oversampling .....8 fs (352 kHz)

[Audio]

Frequency response .....4Hz ~ 20 kHz, ±0.5 dB
Signal to noise ratio.....More than 100 dB
Dynamic range .....More than 95 dB
Total harmonic distortion + noise
.....Less than 0.005 % (at 1 kHz)
Channel separation .....More than 95 dB (at 1 kHz)
Wow & flutter ..... Unmeasurable Limit
Output level / impedance
Variable .....(Max.) 2 V / 0.8 kΩ
Digital output
Coaxial .....0.5 V p-p / 75Ω
Optical .....-15 dBm ~ -21 dBm
(Wave length 660 nm)
Headphone output (Max.).....20 mW (32 Ω)

[General]

Power consumption .....14 W
Dimensions .....W : 440 mm (17-5/16")
H : 125 mm (4-15/16")
D : 397 mm (15-5/8")
Weight (Net).....5.0 kg (11.0 lb)

1060CD/1070CD/DP-R6090/R7090/D-R350

SPECIFICATIONS

D-R350

[Format]

System .....Compact disc digital audio system
Laser .....Semiconductor laser

[D/A Convertors]

D/A Conversion .....1 Bit. (D.R.I.V.E.)
Oversampling .....8 fs (352.8 kHz)

[Audio]

Frequency response .....4 Hz ~ 20 kHz, ± 0.5 dB
Signal to noise ratio.....More than 100 dB
Dynamic range .....More than 93 dB
Total harmonic distortion + noise
.....Less than 0.005 % (at 1 kHz)
Channel separation .....More than 93 dB (at 1 kHz)
Wow & flutter ..... Unmeasurable Limit
Output level / impedance
Variable .....1.2 V / 0.68 kΩ
Digital output
Coaxial.....0.5 V p-p / 75 Ω
Optical.....-15 dBm ~ -21 dBm
(Wave length 660 nm)

[General]

Power consumption.....14 W
Dimensions.....W : 400 mm (15-3/4")
H : 139 mm (5-1/2")
D : 429 mm (16-7/8")
Weight (Net).....5.3 kg (11.7 lb)

Note:
KENWOOD follows a policy of continuous advancements in development. For this reason specifications may be changed without notice.

Note:
Component and circuit are subject to modification to insure best operation under differing local conditions. This manual is based on Europe (E) standard, and provides information on regional circuit modification through use of alternate schematic diagrams, and information on regional component variations through use of parts list.

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